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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,870	06/08/2007	Noel R.M. de Keyzer	L0012US	9678

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EXAMINER	
SCOTT, ANGELA C	

ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
11/25/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/584,870	DE KEYZER ET AL.	
	Examiner	Art Unit	
	Angela C. Scott	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's response of July 27, 2009 has been fully considered. Claims 11-18, 21-23, 25, 26, 28, and 29 have been amended and claims 30 and 31 have been canceled. Claims 11-29 are pending.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 11-25 rejected under 35 U.S.C. 103(a) as being unpatentable over de Keyzer et al. (WO 02/057386).

de Keyzer et al. teaches an adhesive composition for pressure sensitive adhesives, packaging tapes and labels, and multipurpose hot-melt adhesives (Page 1, lines 10-15) comprising a block copolymer, a mixed aliphatic/aromatic hydrocarbon resin, and a plasticizing oil (Page 3, lines 25-27). In Tables 1 and 2, Polymer E exemplifies the block copolymer as a styrene-butadiene/isoprene(B/I)-stryene copolymer with a (B/I) ratio of 1:1, a polystyrene content of 17.6%, and a coupling efficiency of 87%. The block copolymer preferably has a weight average molecular weight ranging from 100,000 to 500,000, preferably from 150,000 to 250,000 (Page 5, lines 21-25). The block copolymer preferably contain 1,2-vinyl bonds and/or 3,4-vinyl bonds in a proportion of at most 15 weight percent, based on the weight of the conjugated diene (Page 5, lines 25-30). Table 12, example F30 shows Polymer E combined with WINGTACK ET as the hydrocarbon resin and C-956 as the plasticizing oil. WINGTACK ET is an aromatically modified aliphatic hydrocarbon resin with a softening point of 94° C, an aromaticity of 4.2% (Page 21, Table 3), and a glass transition temperature (midpoint) of 50° C (Technical Data Sheet). C-956 is a naphthenic oil which is a type of mineral oil (Page 22, Table 3). According to Example F30 in Table 12, the block copolymer is present in an amount of 44% by weight, the resin is present in an amount of 48% by weight, and the oil is present in an amount of 7% by weight.

de Keyzer et al. does not teach that the coupling efficiency of the block copolymer is between 63% and 80%. However, it is well known in the art to optimize result effective

variables, such as coupling efficiencies (MPEP §2144.05). At the time of the invention, a person of ordinary skill in the art would have found it obvious to find the optimal coupling efficiency range through routine experimentation for the adhesive composition, as taught by de Keyzer et al., and would have been motivated to do so in order to change the viscosity of the block copolymer.

Even if all of the claimed effects and physical properties are not positively stated by the reference, the reference teaches all of the claimed ingredients as described above. Therefore, the claimed effects and physical properties would implicitly be achieved by combining the disclosed ingredients. If it is applicant's position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the examiner's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects by combining only these ingredients.

Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Keyzer et al. (WO 02/057386).

de Keyzer et al. teaches an adhesive composition comprising a block copolymer (Page 3, lines 25-27). In Tables 1 and 2, Polymer E exemplifies the block copolymer as a styrene-butadiene/isoprene(B/I)-stryene copolymer with a (B/I) ratio of 1:1, a polystyrene content of 17.6%, and a coupling efficiency of 87%. The block copolymer preferably has a weight average molecular weight ranging from 100,000 to 500,000, preferably from 150,000 to 250,000 (Page 5, lines 21-25). The block copolymer preferably contain 1,2-vinyl bonds and/or 3,4-vinyl bonds in a proportion of at most 15 weight percent, based on the weight of the conjugated diene (Page 5, lines 25-30). According to Example F30 in Table 12, the block copolymer is present in an amount of 44% by weight.

de Keyzer et al. does not teach that the coupling efficiency of the block copolymer is between 63% and 80%. However, it is well known in the art to optimize result effective variables, such as coupling efficiencies (MPEP §2144.05). At the time of the invention, a person of ordinary skill in the art would have found it obvious to find the optimal coupling efficiency range through routine experimentation for the adhesive composition, as taught by de Keyzer et

al., and would have been motivated to do so in order to change the viscosity of the block copolymer.

While the specific example of Polymer E in Table 2 has a molecular weight of 195,000, which is outside of the narrow range of 180,000 to 190,000 and more specifically 180,000 to 185,000, the claimed range lies completely within the preferred range taught by de Keyzer et al. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). MPEP 2144.05.

Response to Arguments

Applicant's arguments filed July 27, 2009 have been fully considered but they are not persuasive.

Applicants argue that the claimed molecular weight is less than that in the examples of de Keyzer et al. However, applicant is reminded that a reference is prior art for all that it teaches and not simply its examples. de Keyzer et al. teaches block copolymers with a molecular weight range of from 100,000 to 500,000, preferably from 150,000 to 250,000 (Page 5, lines 21-25)

Applicant's argue that the claims require the viscosity of the composition to vary only within plus or minus 5% of the starting viscosity after 24 hours and that Polymer E (examples) of de Keyzer et al. does not meet this criteria. Applicants refer to Table 3, Composition B (same as Polymer E), of the instant specification to show that the deKeyzer et al. polymer does not meet the viscosity requirement. However, in Table 1 of the instant specification, a different coupling agent is used for Composition B than for the inventive examples. Therefore, a side by side comparison cannot be made between the polymers. Also, it is not clear as to the exact additives used and how much of the additive is used in the comparative examples and the inventive examples. Moreover, the change in viscosity requirement as claimed applies to the composition as a whole and not to just the polymer used. Therefore, it has not sufficiently been shown that this property is not met by modifying the de Keyzer et al. reference as outlined above.

Applicants argue that the coupling efficiency of the present invention is in a lesser range than that of de Keyzer et al. From examples, de Keyzer et al. shows polymers which have a coupling efficiency in the range of 81% to 87%. While the claimed range, 63% to 80%, and the

prior art range do not overlap, they are close enough that one skilled in the art would have expected them to have the same properties, especially when used in adhesive compositions. Therefore, it would have been obvious to one of ordinary skill in the art to optimize the above range in order to change the viscosity of the polymer, as stated above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela C. Scott whose telephone number is (571) 270-3303. The examiner can normally be reached on Monday through Friday, 8:30am to 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

/A. C. S./
Examiner, Art Unit 1796
November 16, 2009